- eloy water

# biological wastewater treatment plant airoxy®





## its use

#### the airoxy<sup>®</sup> is the ideal solution for wastewater treatment for **small and medium-size communities**: campsites, hotels, housing estate, villages, etc.

The airoxy<sup>®</sup> is a **simple, efficient, cost-effective, easy to maintain and durable solution**, specially designed to meet this need.

### its process



#### 1) the buffer tank

Regulates the SBR hydraulic load by smoothing inflow peaks. Its capacity ensures that it can retain the incoming flow during the settling and discharge phases. It is equipped with a discharge pump customisable depending on the inflow rate.

#### 2 the SBR reactor

- fill and activation: during filling, an air blower injects the amount of oxygen needed to treat the wastewater. It also mixes the mixed liquor.
- settling: depending on the operational mode selected, when the activation time is reached or the level detector identifies a high level, the activation period will end and the settling phase will begin.
- discharge: the treated water is evacuated via floating decanter which pump the effluent from just below the water's surface. The clarified water can be returned to the environment.

#### ③ a sludge silo

A purge pump installed at the bottom of the reactor ensures storage silo filling to remove the excess sludge generated by the biological treatment.

## the product range

the airoxy<sup>®</sup> solution provides you with a **range of installation options** depending on the specificities of your project:

#### airoxy<sup>®</sup> P-90

- 150 m³/day
- prefabricated concrete tank
- your benefit: a plug-and-play solution reduces installation time

#### airoxy<sup>®</sup> KIT

- 600 m³/day
- electromechanical kit installed in a tank manufactured on site
- your benefit: enables you to optimise transport costs if your work site is far from our plant





## benefits

#### easy installation

- suitable for a range of installation conditions: buried and partially buried tanks
- easy to integrate with existing treatment drainage systems: reactor filling by pump, high outflow, etc.

#### high-performance process

- high-performance suited to the requirements of your markets
- option to add tertiary treatment to reduce nitrogen, phosphorus and/or for disinfection
- can be used for industrial treatment
- 20% more compact than an activated sludge or fixed-film system

#### flexible solution

- adjustable treatment and aeration volumes based on fluctuations in the pollution level on input (particularly well-suited for installations whose operation fluctuates between high and low seasons, notably the hospitality industry)
- the **buffer tank** moderates the negative effects of feed points and ensures appropriate staying time (integrated lift pump)

#### incomparable peace of mind

- low visual impact (can be completely underground)
- quiet
- no unpleasant odours: process with no anaerobic treatment phase

#### robust eco-design

- reliable electromechanical equipment: well-known brands available around the world (Siemens, Kaeser, HPE, Flygt, KSB, Hendres Hausser)
- optimised energy yield
- remote management and control of the station

Derformance		
BOD₅	COD	TSS
< 20 mgO <sub>2</sub> /L	< 90 mgO₂/L	< 30 mg/L

Contact us for additional information if more stringent environmental conditions must be met.

## with eloy, you're never alone

#### professional support

eloy **listens and recommends you** on the design and choice of solution

#### support for logistics and work site coordination

eloy delivers directly on site

#### assistance and training for installation

eloy **trains and assists** operators on the operation, use and maintenance of the products and, on request, commissioning of the product

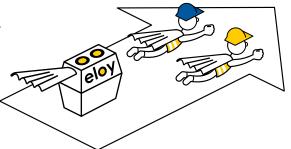
#### • the eloy after-sales department

eloy will assist you with all of your questions about your product

more information is available at **eloywater.com** 

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eloy water



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